

Work Order ID 162530

Monday, June 05, 2017 9:29:48 AM

162530

Page 1

Item ID: D412-698-023 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Automatic Door Opener (fits LH or RH)
 Start Date: 6/20/2017 Start Qty: 2.00 *2* Cust Item ID:
 Required Date: 6/28/2017 Req'd Qty: 2.00 *2* Customer:
 Reference:

Approvals: Process Plan: DAS 21 Date: JUN 07 2017 Tooling: _____ Date: _____ Run Start *NR1*
 QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
IIN D412-698	F								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP D412-698-023								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.06							
Quality Control									

DAS 6 9-89 JUN 27 2017

CHG003

2 11-07-11

DAS 9 9-89

2 JUL 10 2017

DAS 27 9-89

2 11-07-11

DAS 9 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
☐ OTHER : _____					

Work Order ID 162530***162530***

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Monday, June 05, 2017 9:29:48 AM

Item ID: D412-698-023 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Automatic Door Opener (fits LH or RH)
Start Date: 6/20/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 6/28/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: _____	0.00							
130	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-023 Location: FG022								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.20							
Quality Control									

DAS
27
9-89
JUL 11 2017
17/7/12 JH
JUL 11 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	OTHER : _____							
Misidentified	☐	Past Due								

Picklist Print

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Work Order ID: 162530

162530

Parent Item: D412-698-023

D412-698-023

Parent Item Name: Automatic Door Opener (fits LH or RH)

Start Date: 6/20/2017

Required Date: 6/28/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-07-12 JLM
IPP rev B ecn 1207 08.07.03 EC verified by:LL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3552-11 *D3552-11* Door Prop		Manufactured	No			110	Each	9.0000	1	2		DAS 6 JUL 10 2017 9-89	DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				FG				4					
				128491				2					
				151291				1					
				80345				1					
				ST363				5					
				159139				5					
D3594-043 *D3594-043* Floor Doubler Assembly, LH		Manufactured	No			110	Each	2.0000	1	2		DAS 6 JUL 10 2017 9-89	DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				Quarantine				1					
				147748				1					
				ST				1					
				148698				1					
D3594-044 *D3594-044* Floor Doubler Assembly, RH		Manufactured	No			110	Each	5.0000	1	2		DAS 6 JUL 10 2017 9-89	DAS 27 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				Quarantine				1					
				147749				1					
				ST504				4					
				159708				4					

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

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Work Order ID: 162530

162530

Parent Item: D412-698-023

D412-698-023

Parent Item Name: Automatic Door Opener (fits LH or RH)

Start Date: 6/20/2017

Required Date: 6/28/2017

Start Qty: 2.00

Required Qty: 2.00

D3594-5 Manufactured No

110 Each 6.0000 1 2

D3594-5

Doubler

DAS
9
9-89

Location

Loc Qty

Loc Code

ST041

6

158834

6

**

DAS
6
9-89

JUL 10 2017

DAS
27
9-89

D3622-1 Manufactured No

110 Each 34.0000 2 4

D3622-1

Ball Stud

DAS
9
9-89

Location

Loc Qty

Loc Code

ST043

34

158388

34

**

DAS
6
9-89

JUL 10 2017

DAS
27
9-89

MS20426AD4-4 Purchased No

110 Each 2,608.000 2 4

MS20426AD4-4

Rivet

DAS
9
9-89

Location

Loc Qty

Loc Code

GA

1125

125445

1125

ST312

1483

m132536

1483

**

DAS
6
9-89

JUL 10 2017

DAS
27
9-89

MS21073L5 Purchased No

110 Each 24.0000 1 2

MS21073L5

Anchor Nut

DAS
9
9-89

Location

Loc Qty

Loc Code

ST298

24

m135058

1

m137361

23

**

DAS
6
9-89

JUL 10 2017

DAS
27
9-89

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No. _____		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐			
NCR No. _____		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐			
		Use-as-is ☐		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐			
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐				
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval _____			
Description Work Order Deviation				Disposition						
										Completed By _____
										Lead hand / Supervisor Approval Verification _____
										QC / QA Coordinator Approval _____
Root Cause				FAULT CATEGORY						
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	☐	Manufacturing Process ☐								
Misidentified ☐	☐	Past Due ☐	OTHER : _____							

Picklist Print

Monday, June 05, 2017 9:29:47 AM

Work Order ID: 162530

162530

Parent Item: D412-698-023

D412-698-023

Parent Item Name: Automatic Door Opener (fits LH or RH)

Start Date: 6/20/2017

Required Date: 6/28/2017

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0516J

Purchased

No

110

Each

229.0000

2

4

NAS1149D0516.J

DAS

9

9-89

Washer

**

Location

Loc Qty

Loc Code

ST264

229

M134943

29

M137166

200

DAS

9

9-89

JUL 1 11 11 AM '17

DAS

27

9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

7.0 PARTS LIST - PILOT DOOR MODIFICATION KITS

DAS
9
9-89

Qty -015	Qty -023	Part Number	Description
X		D412-698-015	DOOR SUPPORT KIT
	X	D412-698-023	AUTOMATIC DOOR OPENER KIT
2		D3200-1	DOOR POST BLOCK
2		D3200-3	DOOR WEDGE
2		D3201-1	DOUBLER
1		D3201-3	ANGLE
1		D3201-4	ANGLE
	1	D3552-11	GAS SPRING
	1	D3594-5	DOOR DOUBLER
	1	D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	1	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
	2	D3622-1	BALL STUD
	1	MS21073L5	ANCHOR NUT
	2	MS20426AD4-4	RIVET
12		NAS1149D0332J	WASHER (AN960JD10L)
	2	NAS1149D0516J	WASHER (AN960JD516L)
12		MS21042L3	NUT (OR MS21042-3)
12		MS24693-S277	SCREW

162530

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 6/20/2017 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 6/28/2017 **Req'd Qty:** 2.00 ***~***

Customer:

Reference:

Approvals: _____ Process Plan: _____ Date: JUN 07 2017 Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

[illegible]



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Eagle Copters Ltd.
823 McTavish Road N.E.
Calgary, Alberta
Canada T2E 7G9

Number: SH92-43

Issue No.: 5

Approval Date: August 26, 1992

Issue Date: September 14, 2007

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

BELL 204B, 205A, 205A-1, 205B, 212, 214B, 214B-1, 412,
412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104
BELL 214B, 214B-1 H-80
BELL 212, 412, 412 CF, 412 EP H-86
BELL 204B, 205A, 205A-1 H1SW

Description of Type Design Change:

Serviceability Kit: Aux Cowl latches, cockpit door wear pads,
cabin door handle, sliding door roller system and automatic
door opener kit

**Installation/Operating Data,
Required Equipment and Limitations:**

Configuration 1:

Installation of Serviceability Kit to be done in accordance with DOT approved Aero Design Ltd.,
Document Control List A-85-DCL1, Revision 1, dated 27 January 1997, or later approved Revision.

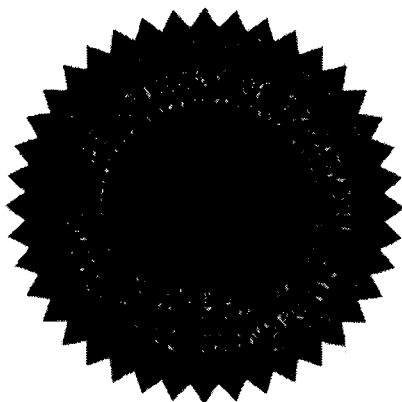
Configuration 2:

Installation of Door Modification Kits to be done in accordance with Transport Canada (TC) approved
Dart Aerospace Ltd. Installation Instructions IIN-D412-698, Revision D or later TC approved revision.

Inspection of Door Modification Kits is to be performed in accordance with Dart Aerospace Ltd.
Instructions for Continued Airworthiness ICA-D412-698, Revision 3 or later TC accepted revision.

-END-

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein.
Prior to incorporating this modification, the installer shall establish that the interrelationship between this
change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the
modified product.




Greg Oucharek
Senior Aircraft Certification Engineer
For Minister of Transport